



**U.S. Immigration
and Customs
Enforcement**

ICE Health Services Corps (IHSC)
Enforcement and Removal Operations
U.S Immigration and Customs Enforcement

IHSC Bloodborne Pathogens and Other Potentially Infectious Materials Guide

**Approved by: Dr. Stewart Smith for
Dr. Jon Krohmer**

Title: ERO – IHSC-AD

Date signed: 10/9/15

Table of Contents	Page:
I. Overview	4
A. Purpose	4
B. Responsibilities	4
C. Acronyms	5
D. Definitions with Expanded Information.....	5
II. Exposure Control Plan.....	9
III. Determine Employee Exposures and Communicate Hazards	9
IV. Hepatitis B Vaccination.....	9
V. Exposure Control Measures	10
A. Standard Precautions	10
B. Transmission-Based Precautions	12
C. Control Measures.....	14
D. Personal Protective Equipment.....	14
VI. Labels and Signs	15
VII. Housekeeping and Spill Clean-up	15
A. Spill Kits	15
VIII. Post-Exposure Reporting, Evaluation and Follow Up	16
A. Sharps Injury Log.....	16
IX. Program Monitoring	16
X. Training and Education.....	16
A. Health Staff	16
B. Detainees/Residents.....	17
XI. References and Resources	17

Foreword

This *IHSC Bloodborne Pathogens and Other Potentially Infectious Materials Guide* supplements the following IHSC Directive:

IHSC Directive: 05-02, *Occupational Health*.

This Guide supplements the ICE Occupational Safety and Health Program Requirements Handbook and explains concepts, assigns responsibilities and details procedures for the prevention and control of exposures to blood and other potentially infectious materials in the health care setting.

The intended audience is health staff supporting health care operations within IHSC-staffed medical clinics in ICE-owned or contracted detention facilities.

I. Overview

A. Purpose

The purpose of this Guide is to provide health staff with procedures, tools and resources to manage bloodborne pathogens (BBP) and other potentially infectious material (OPIM) as required by IHSC Directive: 05-02, *Occupational Health*.

IHSC is dedicated to promoting a safe and productive work environment. IHSC reduces exposures to BBP and OPIM through training; the use of administrative, workplace and engineering controls; and the use of personal protective equipment (PPE).

B. Responsibilities

Public Health, Safety and Preparedness (PHSP) Unit

- Provides national oversight of IHSC BBP Program activities.
- Provides technical assistance related to BBP program activities.
- Reviews and updates this Guide and IHSC Directive: 05-02, *Occupational Health*.
- Develops, reviews and updates the IHSC Exposure Control Plan (ECP) template.
- Conducts periodic program evaluation.

Health Services Administrator (HSA)

- Oversees the medical clinic ECP and the management of accidental exposures and injuries.
- Documents and evaluates BBP exposures and assists the exposed employee with medical care and follow up.
- Ensures that health staff receive orientation and annual training.
- Ensures implementation of the ECP.
- Reviews the ECP at least annually.

Safety, Infection Prevention and Control (SIPC) Coordinator

- Assists the HSA in implementing the ECP for the medical clinic.
- Monitors the ECP and reports problems to the HSA.
- Monitors hand hygiene practices quarterly.

Health Staff

- Adhere to the ECP.
- Maintain awareness of prevention and management of exposures to BBP and OPIM.

Promote and monitor exposure precautions in accordance with current national guidelines and standards as specified in training.

C. Acronyms

ACH – Air changes/hour

AI – Airborne infection isolation (room)

BBP – Bloodborne pathogen

CDC – U.S. Centers for Disease Control and Prevention

ECP – Exposure control plan

EPA – U.S. Environmental Protection Agency

FDA – U.S. Food and Drug Administration

HEPA – High efficiency particulate air (filtration)

HBV – Hepatitis B virus

HIV – Human immunodeficiency virus

JHA – Job hazard analysis

NIOSH – National Institute for Occupational Safety and Health

OPIM – Other potentially infectious material

OSHA – U.S. Occupational Safety and Health Administration

PPE – Personal protective equipment

SIPC – Safety, Infection Prevention and Control

D. Definitions with Expanded Information

Administrative Controls – Methods of controlling employee exposures through enforcement of policies and procedures, modification of work assignment, training in specific work practices, and other administrative measures designed to reduce exposures.

Airborne Infection Isolation (AI) Precautions – Isolation of patients infected with infectious organisms spread through the air to minimize person to person transmission.

Airborne Infection Isolation (All) Room – A single-occupancy patient-care room, formerly called a negative pressure isolation room; environmental factors are controlled so the isolation room receives substantial air changes per hour (ACH) (≥ 12 ACH for new construction since 2001 and ≥ 6 ACH for construction before 2001) and is under negative pressure (the direction of air flow is from the outside adjacent space [the corridor] into the room). All room air is preferably exhausted to the outside, or recirculated if the return air is filtered through a high efficiency particulate air (HEPA) filter.

Airborne Transmission – Dissemination of airborne particles that can infect people over time and distance (droplet nuclei 1 to 5 μm in diameter associated with coughing or aerosolization of contaminated fluids) .

Antiseptic agent- Antimicrobial substances that are applied to the skin to reduce the number of microbial flora. Examples include alcohols, chlorhexidine, chlorine, hexachlorophene, iodine, chloroxylenol (PCMX), quaternary ammonia compounds, and triclosan.

Antiseptic handwash- Washing hands with water and soap or other detergents containing and antiseptic agent.

Antiseptic hand rub- Applying an antiseptic hand-rub product to all surfaces of the hands to reduce the number of microorganisms present.

Blood – Human blood, blood components, and products made from human blood.

Bloodborne Pathogens – Microorganisms that are present in human blood and can cause disease in humans (e.g., hepatitis B virus and human immunodeficiency virus (HIV)).

Body Fluid – Fluid secreted by the body including, but not limited to blood, semen, saliva, urine and feces.

Contagious – When a disease can be transmitted from one living being to another through direct or indirect contact; communicable; infectious; usually microorganisms.

Culture of Safety – The shared commitment of management and employees to ensure a safe work environment.

Direct Contact Transmission – Direct transfer of a microorganism from an infected person to another person.

Engineering Controls – Controls that isolate or remove a hazard from the workplace (e.g., ventilation, isolation, sharps disposal containers, self-sheathing needles).

Exposure – The condition of being subjected to something in the working environment (noise, dust, chemicals, radiation, infectious agents) that could have an adverse health effect.

Exposure Incident – Eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials.

Hand Hygiene – Handwashing with plain (non-antimicrobial) soap and water; anti-septic handwash (soap containing antiseptic agents and water); antiseptic hand rub (waterless anti-septic product, most often alcohol-based, rubbed on all surfaces of hands); or surgical hand antisepsis (antiseptic handwash or antiseptic hand rub performed preoperatively by surgical personnel to eliminate transient hand flora and reduce resident hand flora).

Handwashing Station – A station providing an adequate supply of running portable water, soap, and single use towels or hot air drying machines, or a waterless handwash solution.

High Efficiency Particulate Air (HEPA) Filter – A filter that is certified to remove $\geq 99.97\%$ of particles $0.3\ \mu\text{m}$ in size, including *M. tuberculosis*-containing droplet nuclei; either portable or stationary; required for All room exhaust ventilation; requires expertise in installation and maintenance.

Infection Control – Institutional procedures and policies for monitoring and attempting to control the transmission of communicable diseases.

Near-miss – An event or situation that could have resulted in an accident, injury, or illness, but did not, because of chance or a timely intervention.

Needleless IV System – An IV system that administers medication through an IV access device without using needle connections.

Needle-stick Injury – A penetrating stab wound caused by a needle.

N95 Disposable Respirator – An air-purifying, filtering-facepiece respirator that is $\geq 95\%$ efficient at removing $0.3\ \mu\text{m}$ particles and is not resistant to oil; education and fit testing is required before wearing a respirator; used to protect the wearer from exposures in the air; not worn by a patient.

Occupational Exposure – Skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that occurs during the performance of work activities.

Other Potentially Infectious Material (OPIM) – Include 1) semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; 2) unfixed tissue or organ (other than intact skin)

from a human (living or dead); 3) HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV-containing culture medium or other solutions; and 4) blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Personal Protective Equipment (PPE) – Equipment that protects a person from hazardous exposures such as chemicals, dust, noise, radiation, infectious diseases and includes respirators, gloves, mask, goggles, gowns, face shields, ear plugs, hard hats, and steel toe boots.

Regulated Waste – Liquid or semi-liquid blood, caked or dried blood, or other potentially infectious materials capable of releasing these materials during handling or compression.

Respirator - A form of PPE with filtering capability that fits snug on the face over the nose and mouth to prevent the wearer from inhaling hazardous airborne particles.

Safety Device/Sharps with Engineered Sharps Injury Protections - A non-needle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Sharps - An object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broke capillary tubes, and exposed ends of dental wires.

Sharps Injury – An injury caused by sharps, including but not limited to cuts, abrasions, or needle sticks.

Standard Precautions – Infection prevention practices that apply to all patients regardless of infection status; a combination and expansion of Universal Precautions and Body Substance Isolation; based on the principle that all blood, body fluids, secretions and excretions except sweat, non-intact skin, and mucous membranes contain transmissible infectious agents; includes hand hygiene, and depending on the anticipated exposure, use of gloves, gown, mask, eye protection, or face shield; equipment or items in the patient environment likely to have been contaminated with infectious fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for handling, contain heavily soiled equipment, properly clean and disinfect or sterilize reusable equipment before use on another patient).

Surgical Mask – A protective device that covers the patient's nose and mouth to protect health care workers from exposures to wearer-generated microorganisms.

Symptom Screen – A procedure used during a clinical evaluation in which a person is asked if they have experienced any departure from normal in function, appearance, or sensation related to the health condition of interest.

Transmission-Based Precautions – Precautions that provide additional protections beyond Standard Precautions to interrupt the transmission of pathogens.

Work Practice Controls – Controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

II. Exposure Control Plan

An ECP is a location-specific plan with activities, practices and procedures intended to minimize occupational exposures to blood and OPIM. The ECP includes the following elements:

- Determine employee exposure to BBP.
- Communicate workplace hazards related to BBP.
- Offer hepatitis B vaccination.
- Use exposure control measures:
 - Standard precautions;
 - Transmission-based precautions;
 - Administrative controls;
 - Engineering controls;
 - Work practice controls;
 - Personal protective equipment; and
 - Housekeeping and spill clean-up.
- Report, evaluate, and follow up on exposure incidents.
- Document and keep records of exposures.
- Train employees.

III. Determine Employee Exposures and Communicate Hazards

Employee exposure to BBP and OPIM is part of the job hazard analysis (JHA). The JHA is described in the *IHSC Personal Protective Equipment Program Guide*. A JHA assesses job tasks for hazards without regard for the use of PPE or other controls. The HSA must use the JHA to determine which employees have a potential for workplace BBP exposure. Employees with the potential for skin, eye, mucous membrane, or parenteral contact with blood or OPIM are included in the ECP. The HSA must ensure that health staff are aware of these BBP hazards and adhere with the control methods in the ECP.

IV. Hepatitis B Vaccination

The U.S. Occupational Safety and Health Administration (OSHA) BBP Standard requires that all employers offer the hepatitis B virus (HBV) vaccine to their employees

who have the potential for workplace exposure to blood and OPIM. The HSA must ensure that health staff are aware of the importance of the HBV vaccine and its benefits. If an employee refuses to get the HBV vaccine, or if it is contraindicated, the employee must provide documentation to the HSA. Please refer to the *IHSC Employee Health Program Guide* for additional details on HBV vaccine requirements.

V. Exposure Control Measures

A. Standard Precautions

Standard precautions reduce the spread of microorganisms by direct or indirect contact, and reduce the risk of illnesses caused by microorganisms. Standard precautions when employed protect health staff from blood, body fluids, non-intact skin, and mucous membranes.

Health staff must apply standard precautions when caring for detainees/residents regardless of their diagnosis or presumed infectious status. Standard precautions include the following:

- Hand hygiene;
- Respiratory hygiene and cough etiquette; and
- Safe injection practices.

Hand Hygiene

Hand hygiene is the single most effective measure to prevent the spread of infectious illness from person to person. Readily accessible handwashing facilities are essential to the successful practice of hand hygiene. Sinks with running water and soap should be available in every IHSC-staffed medical clinic exam room. If not directly in the exam room, soap and running water must be immediately available outside the exam room and there must be no barriers to access. Antiseptic hand rub also supports hand hygiene practices. Hand hygiene training ensures health staff awareness of the need to wash hands with antiseptic handwash as soon as possible after any exposure to BBP or OPIM and after removing PPE.

The SIPC Coordinator monitors and documents health staff compliance with hand hygiene quarterly. Hand hygiene compliance indicators include cleaning hands:

- Before and after each patient interaction;
- Before and after handling equipment for patient care;
- Before and after going to the restroom;
- Before and after going on breaks and eating;
- After removing gloves and other PPE; and
- Before leaving work at the end of the day.

Table 1. Antiseptic Handwash

When to use antiseptic handwash (antiseptic hand rub is not sufficient)	
When hands look or feel soiled and dirty. After contact with blood, bodily fluids or contaminated surfaces (even if gloves are worn). After handling biohazard waste (even if gloves are worn). After enough consecutive uses of antiseptic hand rub that hands feel “grubby” from the build-up of emollients.	
Instructions	
<ol style="list-style-type: none">1. Turn on the faucet and wet hands with water.2. Apply a liberal amount of soap to hands, and rub them together vigorously for at least 15-20 seconds, covering all surfaces of the hands and between the fingers.3. Rinse hands well with water and dry thoroughly with a disposable towel.4. Use another towel to turn off the faucet.	

Table 2. Antiseptic Hand Rub

Instructions	
<ol style="list-style-type: none">1. Apply product to the palm of one hand and rub hands together covering all surfaces of hands and fingers until they are dry.2. Follow manufacturer’s recommendations regarding the volume of product and use.3. Dispenser placement must comply with National Fire Protection Association (NFPA) recommendations according to NFPA 101: Life Safety Code: Corridor width is six feet or greater. Dispensers are a minimum of four feet apart. Maximum capacity 1.2 L in rooms and corridors; 2.0 L in suites. Dispensers cannot be installed over electrical outlets/switches. May be installed in carpeted areas only if there is a sprinkler smoke compartment. Maximum amount of ten gallons of solution per smoke compartment; five gallons in storage.	

Respiratory Hygiene/Cough Etiquette

The following are elements of good respiratory hygiene and cough etiquette:

Control coughs at their source: cover mouth and nose with tissue when coughing and place a surgical mask on the source of the cough, when appropriate.

Wash hands after contact with respiratory secretions.
Practice spatial separation (ideally greater than three feet).
Place persons with known or suspected respiratory infections in separate waiting areas, if possible.
Educate health staff, detainees and visitors.
Post signs that depict good respiratory hygiene and cough etiquette practices in languages appropriate to the population.

Safe Injection Practices

The following safe injection practices are part of standard precautions:

Use needleless systems for IVs and medication delivery as available.
Use single dose vials as available.
Use sterile, single-use, disposable safety needles and syringes for each use of a multiple dose vial or injection into a solution (e.g., IV fluid).
Use sterile, single-use, disposable safety needles and syringes for each intravenous, intramuscular, subcutaneous or intradermal administration.

B. Transmission-Based Precautions

Health staff must implement transmission-based precautions when treating detainees/residents with documented or suspected infection with highly transmissible or epidemiologically important pathogens for which additional measures beyond standard precautions are needed.
Health staff must empirically implement precautions when a condition is suspicious enough to test or treat for the causative agent.
Health staff must use transmission-based precautions in addition to standard precautions.
Some disease processes require the implementation of more than one type of precaution (e.g., varicella requires both contact and airborne precautions).
For detailed guidance on the type and duration of transmission precautions by organism or syndromes, refer to the [Guidelines for Environmental Infection Control in Health-Care Facilities - Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee \(HICPAC\)](#).

Post Signs

Health staff must post signs whenever implementing transmission-based precautions to warn facility staff, health staff and visitors of the requirements for entry into the restricted area.
Health staff must post signs on the door of an isolation room whenever in use.
Health staff must use clear, eye-catching, professionally designed and laminated signs.

Contact Precautions

Contact precautions are intended to prevent transmission of infectious agents spread by direct or indirect contact.

Health staff must don gloves and a gown for patient contact prior to entering patient care rooms requiring contact precautions.

Health staff must don PPE whenever entering the detainee's/resident's environment, since the level of exposure cannot be predicted.

Health staff must remove and dispose of PPE before exiting the patient care room.

Health staff must decontaminate hands immediately upon exiting the patient care room.

Health staff must use disposable or dedicated patient care equipment.

Health staff recommend that the facility uses disposable utensils and plates for serving meals during contact precautions.

Health staff recommend that a detainee/resident with contact precautions is housed in a private room with a separate bathroom or with a similarly infected cohort, as appropriate. If a private bathroom is not available, health staff recommend to facility staff that shared bathrooms are disinfected after each use.

Droplet Precautions

Droplet precautions are intended to prevent the transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.

Health staff must don a surgical face mask when entering a detainee's room requiring droplet precautions.

Health staff recommend that a detainee/resident with droplet precautions is housed in a private room or with a similarly infected cohort; a single occupancy room is preferred.

Airborne Precautions

Airborne infection precautions are intended to prevent transmission of infectious agents that remain infectious over long distances when suspended in the air.

Airborne infection precautions require the use of an All room with negative pressure ventilation.

Health staff must don a fit-tested particulate respirator prior to entering the room.

Health staff recommend that if the infectious detainee/resident leaves the isolation room, the detainee/resident is required to don a tight fitting surgical mask.

C. Control Measures

The HSA must implement administrative, work practice and engineering controls to eliminate or minimize employee exposures. Engineering and work practice controls are used to prevent or minimize exposure to BBP and OPIM by isolating or removing the hazard or implementing practices to reduce the possibility of exposure. Standardized blood/bodily fluid clean-up techniques must be practiced to prevent the spread of infectious diseases.

D. Personal Protective Equipment

PPE such as gloves, goggles, gowns, shoe covers and/or respirators are used for work activities that have anticipated BBP or OPIM exposures that cannot be controlled in other ways. For details on the IHSC PPE Program, refer to the *IHSC Personal Protective Equipment Program Guide*.

Table 3. Examples of Control Measures

Administrative Controls Institutional policies and procedures. Modification of work assignments. Training. Provision of fiscal and human resources.
Work Practice Controls Instructions to not recap sharps. Respiratory hygiene/cough etiquette. Avoidance of eating, drinking or applying cosmetics in clinical or treatment areas. Procedures involving blood or OPIM that minimize splashing, spraying, spattering and generation of droplets.
Engineering Controls Handwashing facilities; Eye wash stations; Safer needle devices; Needleless systems; Regulated medical waste containers; Biohazard labeled containers; and Ventilation.
Personal Protective Equipment Respirators; Goggles or face shields; Gloves; Gowns and other protective clothing; and Foot covers.

VI. Labels and Signs

The HSA or designee must affix warning labels on containers of regulated waste, and other containers used to store, transport, or ship BBP or OPIM.

The HSA or designee must clearly identify refrigerators and freezers containing BBP or OPIM with signs on their doors.

The HSA or designee must include the [biohazard symbol](#) on all warning labels and signs.

Red bags or red waste containers are a universally accepted substitute for biohazard labels.

VII. Housekeeping and Spill Clean-up

Health staff must clean and decontaminate environmental and work surfaces immediately after becoming contaminated with body fluids such as blood, vomit, urine and feces. These fluids are considered infectious. Health staff must use procedures and equipment to prevent cross-contamination of other areas. Health staff must never use mops or paper towels to clean up blood or bodily fluid spills. Health staff must always wear PPE to clean up spills. Health staff must dispose of the contaminated material in the designated waste containers.

A. Spill Kits

The HSA must ensure that spill kits are readily available in the medical clinic, in patient care areas, and other designated areas for use in cases of spills of blood or other body fluids. Spill kits must contain PPE and equipment to clean up any potential bio hazardous material. Not all of the contents in the spill kit will be used for every spill. Face, skin, clothes and shoes must be protected during spill clean-up. Some pathogens like hepatitis B can live in dried blood for seven days. When a spill kit is used in the medical clinic, health staff must restock it before it is placed back in the medical clinic. For additional information on spill kits please see: [Spill kit FAQ](#)

Spill Kits Contents

- Two pairs of non-latex nitrile, 4-mil thickness medical grade gloves;
- One disposable face shield;
- One disposable face mask;
- One pair of disposable shoe covers for gross contamination;
- One surgical cap for gross contamination;
- One disposable apron;
- One absorbent material pack;
- One pair of tongs/forceps to pick up broken glassware;
- One dustpan/brush to clean up broken glassware;
- Two scoops/scrapers;

- One shovel;
- One can of EPA-registered disinfectant;
- Two red biohazard bags with ties;
- One black plastic bag for non-medical waste;
- One small bottle of hand sanitizer;
- One instruction sheet;
- One disposable towel;
- Four disposable absorbent rags; and
- Two disposable towelettes.

VIII. Post-Exposure Reporting, Evaluation and Follow Up

The OSHA BBP Standard requires rapid determination and response to an accidental exposure to blood or OPIM. The HSA must ensure that important post-exposure recommendations, reporting, and recording occur after an employee pathogenic exposure. Please refer to the *IHSC Employee Health Program Guide* for details.

A. Sharps Injury Log

The HSA or designee must maintain a log of sharps injuries to record, track, and assess the occurrence in the medical clinic. The log must include the following for each sharps injury:

- Date of injury;
- Type and brand of the device involved;
- Work area where the injury occurred; and
- Explanation of how the injury occurred.

IX. Program Monitoring

PHSP Unit staff collect information periodically from the HSA to monitor the implementation of the IHSC BBP program and to assess compliance with program requirements.

X. Training and Education

A. Health Staff

Training is extremely important to the success of the BBP program. The HSA must ensure that health staff receive orientation and annual training and instruction on all of the topics covered in this Guide.

The HSA or designee must maintain employee training records in a file and includes the date and title of the training, a summary of the training, the name of the instructor, the names and job titles of the attendees, and their signatures.

B. Detainees/Residents

Health staff educate detainees/residents on infection prevention. The pamphlets, posters, and videos used should be available in several languages. The following are important infection prevention topics for detainees/residents to learn:

Hand hygiene and handwashing techniques;
Respiratory hygiene and cough etiquette techniques;
General hygiene practices; and
Transmission-based precautions related to specific medical conditions.

XI. References and Resources

- (1) [OSHA BBP Standard](#)
- (2) [OSHA Fact Sheet - Hepatitis B Vaccination Protection](#)
- (3) [OSHA Safety and Health Topics - Bloodborne Pathogens and Needlestick Prevention](#)
- (4) [OSHA Model Plans and Programs for the OSHA BBP and Hazard Communications Standards](#)
- (5) [Guidelines for Environmental Infection Control in Health-Care Facilities - Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee \(HICPAC\)](#)
- (6) [ICE Safety & Health Branch](#)
- (7) ICE Occupational Safety and Health Program Requirements Handbook, accessible on the [ICE Safety & Health Branch InSight page](#)
- (8) [NIOSH Information for Employers Complying with OSHA's BBP Standard](#)
- (9) [CDC Workbook for Designing, Implementing, and Evaluating a Sharps Injury Prevention Program](#)
- (10) [National HIV/AIDS Clinicians' Consultation Center](#)
- (11) [NIOSH Workplace Safety & Health Topics - Bloodborne Infectious Diseases: HIV/AIDS, Hepatitis B, Hepatitis C](#)

- (12) [HICPAC - 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#)
- (13) [CDC Healthcare-associated Infections \(HAIs\) - In Outpatient Settings](#)
- (14) [CDC MMWR Guideline for Hand Hygiene in Health-Care Settings](#)
- (15) [Updated US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Postexposure Prophylaxis](#)